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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/973,005
Filing Date: October 10, 2001
Appellant(s): PAUSTIAN ET AL.

James Wray
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/23/2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1-5, 7-28 and 48-52.

Claims 29-47 are allowed.

Claim 6 is objected to.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on 12/23/2004 has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim 1 is rejected under 35 USC 103(a) as being unpatentable over Welsch et al (3,358,950) in view of Forrester (5,620,058). This rejection is set forth in a prior Office Action, mailed on 4/28/2004.

Claims 2-5 and 7-28 are rejected under 35 USC 103(a) as being unpatentable over Welsch et al in view of Forrester. This rejection is set forth in a prior Office Action, mailed on 4/28/2004.

Claim 48 are rejected under 35 USC 103(a) as being unpatentable over Welsch et al in view of Forrester. This rejection is set forth in a prior Office Action, mailed on 4/28/2004.

Claims 49-52 are rejected under 35 USC 103(a) as being unpatentable over Welsch et al in view of Forrester. This rejection is set forth in a prior Office Action, mailed on 4/28/2004.

(10) Response to Argument

1. *Section I: Response to applicant's assertion that claim 1 is patentable under 35 U.S.C. 103 (a) over Welsch and Forrester.*

    a. The applicant has asserted that "nothing in the references, either singly or in combination teaches or suggest the claimed features." The examiner disagrees. The next two paragraphs outline which portions of claim 1 are taught by the cited references.

    Welsch et al (Welsch) discloses a rapid deployment system comprising an aircraft, specifically comprising a helicopter and that the rapid deployment system is connected to the helicopter at a specific location (see Figures 1 and 4).

    Forrester discloses that it is known to adapt his emergency evacuation system to be operable in special operational insertions where insertion is from an aircraft (see Col. 3, lines 59-63). Forrester teaches at least one inflatable

landing tube coupled to the aircraft (3), the tube having an inner surface (inherent), and outer surface (inherent), a top end and bottom end (Figure 1, illustrates both the top end and bottom end of tube #3), an inflatable exit slide (#17), positioned at the open bottom (Col. 7, line 10), and air source (see Col. 6, line 53), that keeps the exit slide and landing tube at an optimum pressure (see Col. 7, lines 6-8), plural connectors positioned on the landing tube (#15), at least one entry port (see Col. 6, line 44), plural flexible retarders (#5, 7, 9 and 11), that extend inward from the inner surface of the landing tube for retarding gravitational decent of cargo and personnel (see Col. 8, lines 59-61).

It is the examiner's position that Welsch in view of Forrester teach and suggest every feature in the claim, as illustrated above.

b. The applicant asserts that there is "no suggestion or motivation in the prior art to combine the elements as done by the present invention and hence the claims cannot be rendered obvious". The examiner respectfully disagrees. Welsch teaches that it is known to use a rapid deployment system with aircraft (see Figure 1 to Welsch). Forrester suggests that his emergency evacuation system could be used in combination with an aircraft for the insertion of troops into a hostile situation (see col. 3 line 59-63 to Forrester). It would have been obvious to employ the device of Forrester in combination

with an aircraft for inserting troops, as taught by Welsch, for the purpose increasing the safety of personnel in a hostile situations.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

c. The applicant has further asserted that the references do not teach an inflatable tube with connectors that can be coupled to an aircraft. The examiner respectfully disagrees. Welsch teaches that it is known to attach the deployment tube to an aircraft. Forrester teaches that it is known to use an inflatable tube with connectors (15) and teaches that it is known to use the device in combination with an aircraft. It would have been obvious to one having ordinary skill in the art at the time the invention was made to connect an inflatable tube with connectors to and aircraft, for the purpose of increasing the safety of deploying troupes from an aircraft.

2. *Section II: Response to applicant's assertion that claims 2-5 and 7-28 are patentable under 35 U.S.C. 103 (a) over Welsch and Forrester*

a. The applicant has asserted that he is under no obligation to provide evidence of non-obviousness. The examiner does not dispute this statement. The examiner has never asserted that the applicant has the obligation to provide evidence of secondary consideration. In fact that examiner is confused as to why the applicant has argued that he is not required to provide evidence of non-obviousness.

The examiner asserts that the applicant has not provided arguments that clearly define the differences between the prior art and the claimed invention as defined in dependant claims.

The examiner views the applicant's assertions, in this section, as a Red Herring. The examiner used the applicant's own patent against him, and in doing so did not deem it necessary to write out each and every limitation due to the fact that applicant's dependant claims recite verbatim the subject matter disclosed in his previous patent.

Instead of pointing out the difference between the prior art and the claims, the applicant has simply listed what each dependant claim adds to its base claim.

The following is a description of how Welsch and Forrester read on the dependant claims. Since the applicant has neglected to point out the

difference between the prior art and the claimed subject matter, the examiner cannot reply to any arguments in this section, and merely provides an explanation of how the prior art reads on the claims. Unless otherwise noted, all references are made to the Forrester Patent.

Claim 2: wherein the landing tube comprising multiple tubular segments connected to each other to form a continuous descent tube (#13)

Claim 3: wherein the connectors are selected from the group consisting of bolts (Col. 6, line 67)

Claim 4: wherein the landing tube is connected to an exit port of the aircraft (see figure 1 to Welsch), and wherein the at least one entry port of the landing tube is proximal the exit port of the aircraft (see Figure 1 to Welsch).

Claim 5: wherein the landing tube is free flowing (inherent that an inflatable tube is "free flowing") and detachable from the aircraft (inherent that any tube that is "attachable" to an aircraft is also "detachable" therefrom).

Claim 7: wherein the landing tube is connected to exterior edges of the exit port of the aircraft (#15 is connected to the exterior edges) and wherein the entry port further comprises a window coaming adapter position around the

exterior edges and a membrane carried by and extending between the sides of the adapter and wherein the membrane expands with the landing tube as the landing tube is inflated. (#29)

Claim 8: wherein the membrane comprises multiple layers and expansion cells between adjacent layers for allowing independent expansion of the layers (#33)

Claim 9: wherein the exit port of the aircraft is selected from a group consisting of cargo openings (see Figure 1 to Welsch)

Claim 10: wherein the entry port of the landing tube has a first shield (#35) positioned behind the membrane and connected to the aircraft for protecting the membrane, the shield having a first arm and a second arm (see Figure 18)

Claim 11: further comprising a second shield extending between edges of the exit port such that the membrane is sandwiched between the first shield and the second shield (#41).

Claim 12: further comprising an override lock positioned on the first shield to prevent the first shield from opening automatically (#42)

Claim 13: further comprising ribs (#47) positioned in the middle layer of the membrane to assist in expansion of the membrane and to provide form and rigidity to the membrane once the system is deployed, and wherein the ribs are flexible in a horizontal plane and rigid in a vertical plane (Col. 8, lines 20-26)

Claim 14: further comprising reinforced panels connected to the ribs for vertically linking the ribs (see Col. 8, lines 29-31)

Claim 15: further comprising wall channels positioned in the exit port for holding the membrane and the ribs (see Col. 8, line 33)

Claim 16: further comprising spring loaded ratchet lock mechanism positioned near the ribs, and wherein each rib has a joint at a center of the rib and a locking groove for catching the spring loaded ratchet lock mechanism (see Col. 8, lines 38-42).

Claim 17: wherein the landing tube, the membrane and the ribs have shaped cross-section when fully inflated (see col. 8, lines 41-42)

Claim 18: wherein the flexible retarders extend inward from the inner surface of the landing tube and are positioned such that those descending remain along a central region of the landing rube and such that the descent has reducing velocity (see Claim 18 of Forrester)

Claim 19: wherein the flexible retarders diverting slopes on a first side of the landing tube, comprise bouncing bulges on a second side of the landing tube which is opposite the first side, cushions extending along sides of the landing tube between the bouncing bulges and diverting slopes, and friction assistors on the cushions (see Figure 1)

Claim 20: wherein the diverting slopes and the bouncing bulges alternate from a front wall of the landing tube to a back wall of the landing tube along entire lengths of the landing tube (see Figure 5)

Claim 21: further comprising flapper valves on the flexible retarders for absorbing excess energy of those descending and for discharging air from the structures (61)

Claim 22: wherein the diverting slopes comprise deflector ramps (77) connected to the landing tube and deflector curtains (79) extending from the deflector ramps

Claim 23: further comprising a release bar extending from the tube at the entry port to facilitate entry into the inflated tube (89).

Claim 24: wherein the bouncing bulges connected to inner surfaces of the tube comprise an inflated safety core and friction points extending from the core (93).

Claim 25: wherein the friction assistors have multiple breakaway cushion quills (95) and wherein each cushion quill further comprises a friction strand (97) an inflated cushion (99) connected to the strand, and a breakaway retention and inflation point (101) connected to the inflated cushion.

Claim 26: wherein the exit slide comprises an inflatable exit ramp (17).

Claim 27: further comprising an inflated pendulum barrier extending from the bottom end of the rube toward the exit ramp (121)

Claim 28: wherein the exit ramp comprises interconnected front and rear sections to provide flexibility when landing in rough terrain (Figure 1 illustrates a ramp having a front and rear section where its inherent that all elongated three dimensional objects have a front and rear).

3. *Section II: Response to applicant's assertion that claim 48 is patentable under 35 U.S.C. 103 (a) over Welsch and Forrester.*

a. The applicant has asserted, "Nothing in the references either singly or in combination teaches or suggest the claim features." The examiner however respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

b. The next two paragraphs outline which portions of claim 48 are taught by the cited references.

Welsch et al (Welsch) discloses method for rapid deployment comprising an aircraft, specifically comprising a helicopter and that the rapid deployment system is connected to the helicopter at a specific location (see Figures 1 and 4).

Forrester discloses that it is known to adapt his emergency evacuation system to be operable in special operational insertions where insertion is from an aircraft (see Col. 3, lines 59-63). Forrester teaches at least one inflatable landing tube coupled to the aircraft (3), exit ramps (#17), and internal flexible retarders (#5, 7, 9 and 11), activating gas generators connected to the tube (see Col. 6, lines 40), inflating the tube (see Col. 6, line 40), the internal flexible retarders and the exit ramps with gas delivered from the activated gas generators (see claim 6 lines 39-45), entering the tube through an exit port in the aircraft communicating with an entry pot in the rube (see Col. 6, lines 44-45), deploying down the tube (see Col. 6, lines 45-51), impacting the internal flexible retarders extending inward from an inner surface of the rube (see Col. 6, lines 45-55), exiting the rube, sliding down the exit ramp and landing ready for combat from the tube (see Col. 6, lines 45-55 and see Col. 3, lines 59-63).

c. The applicant suggests that hindsight reconstruction forms the only basis for the Examiners' rejection. The applicant further asserts that there is no suggestion or motivation in the prior art to combine the elements as done by the present invention and hence the claims cannot be rendered obvious. The examiner respectfully disagrees on both counts. Welsch teaches that it is known to use a rapid deployment system with aircraft (see Figure 1 to Welsch). Forrester suggests that his emergency

evacuation system could be used in combination with an aircraft for the insertion of troops into a hostile situation (see col. 3 line 59-63 to Forrester). It would have been obvious to employ the device of Forrester in combination with an aircraft for inserting troops, as taught by Welsch, for the purpose increasing the safety of personnel in a hostile situations.

4. *Section IV: Response to applicant's assertion that claims 49-52 are patentable under 35 U.S.C. 103 (a) over Welsch and Forrester.*

a. The applicant has asserted that he has not been giving a fair opportunity to rebut the rejections. However the examiner disagrees. The examiner views the applicant's assertions, in this section, as a Red Herring. The examiner used the applicant's own patent against him, and in doing so did not deem it necessary to write out each and every limitation due to the fact that applicant's dependant claims recite verbatim the subject matter disclosed in his previous patent.

Instead of pointing out the difference between the prior art and the claims, the applicant has simply listed what each dependant claim adds to its base claim.

b. The following is a description of how Welsch and Forrester read on the dependant claims. Since the applicant has neglected to point out the

difference between the prior art and the claimed subject matter, the examiner cannot reply to any arguments in this section, and merely provides an explanation of how the prior art reads on the claims. Unless otherwise noted, all references are made to the Forrester Patent.

Re – Claim 49: wherein the installing the tube includes installing the tube along an opening of the aircraft (Figure 1 to Welsch illustrates a tube installed along an opening of the aircraft.)

Re – Claim 50: wherein the deploying comprises deploying cargo (see Welsch's Abstract)

Re – Claim 51: wherein the deploying comprises deploying troops (see Welsch's Abstract)

Re – Claim 52: wherein the impacting comprises impacting systematically on the flexible retarders (see Forrester Col. 2, lines 25-33) and wherein the landing comprises landing upright from the tube (inherent that that would land upright, but for an upright landing the evacuees would land on their heads and incur serious harm.)

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

TERI PHAM LUU
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January 10, 2005

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